

AMENDMENTS

In the Specification:

Amend the paragraph beginning at page 5, line 13 as follows:

The invention is explained in more detail below with reference to the drawing which depicts an advantageous illustrative embodiment and in which:

Fig. 1 shows a side view of the prosthesis,

Fig. 2 shows a plan view of the tibial sliding surfaces,

Fig. 3 shows a section through the tibial slid-in surfaces taken along line 21 of Fig. 2,
and

Figs 4 and 5 show two side views from opposite sides, with the femoral part rotated[[.]],
and

Fig. 6 shows a side view of the prosthesis in flexure.

Amend the paragraph beginning on page 6, line 9 as follows:

In the non-rotated position (Fig. 1), the femoral sliding surfaces 5 rest with their area 13, whose direction runs approximately perpendicular to the radius, on the area 14 of normal contact of the tibial sliding surfaces 9, the direction of which area 14 runs approximately perpendicular to the axis 12. Upon flexion movement (Fig. 6), the portion lying between the area 13 and the rear end 15 of the femoral sliding surfaces can come into contact with the tibial sliding surface 9. In the example shown, this portion extends as an arc of a circle of constant radius 24 to the flexion axis 11. The profile of the sliding surface is constant in this portion.

Amend the paragraph beginning on page 7, line 1 as follows:

The tibial sliding surface 9 is weakly concave in the sagittal plane, as is shown in Fig. 3. The radius 23 of curvature is considerably greater than the radius of the femoral sliding surface portion 13-15. This is necessary so that, in the event of rotation, the femoral sliding surfaces can move forward and backward a slight distance – substantially without impediment - starting from the area of normal contact 14. In the event of powerful rotation, the condylar sliding surfaces 5 leave the area 14 of normal contact. On one side (see Fig. 4), they move in the upwardly sloping portion 16 of the tibial sliding surfaces which lies in front of the area of normal contact 14. On

the other side (Fig. 5), they move in the rear, upwardly sloping portion 17 of the tibial sliding surfaces 9.

Amend the paragraph beginning on page 7, line 24 as follows:

If one wishes to maintain linear contact between the condylar sliding surfaces 5 and the tibial sliding surfaces 9 in these portions, then the tibial sliding surfaces 9 have to be shaped such that they have the same profile as the condylar sliding surfaces 5 in the direction of circle arcs 20 about the rotation axis 12 in a sectional plane containing this rotation axis. This can readily be achieved with the aid of a tool which has the profile of the condylar sliding surfaces and is rotated about the axis 12. However, this is relatively complicated. It is simpler to mill the tibial sliding surfaces 9 by means of tools that are moved in the anteroposterior direction [[20]]. In this case, when rotation takes place, the ideal linear contact between the condylar sliding surfaces 5 and the tibial sliding surfaces 9 is dispensed with to a greater extent the farther the point of the respective contact is removed from the area 14 of normal contact. This is not a problem, however, because such strong rotation occurs relatively rarely and the periods of sustained load transmission to the area 14 of normal contact are limited. In the event of such strong rotation, it is crucial that not just one of the two condylar sliding surfaces cooperates with the tibial sliding surface, but both.